(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 14 October 2004 (14.10.2004)

PCT

(10) International Publication Number WO 2004/087934 A1

(51) International Patent Classification⁷: 1/04, 19/62, C12R 1/01, 1/04, 1/465

C12P 1/00,

(21) International Application Number:

PCT/EP2004/003662

(22) International Filing Date: 1 April 2004 (01.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 03100896.4

4 April 2003 (04.04.2003) EP

(71) Applicant (for all designated States except US): DSM IP ASSETS B.V. [NL/NL]; Het Overloon 1, NL-6411 Te Heerlen (NL).

(72) Inventors; and

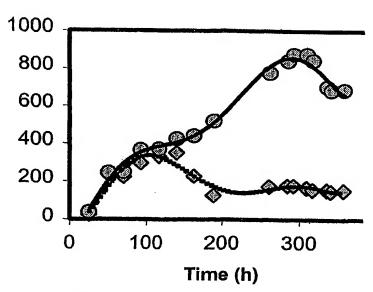
(75) Inventors/Applicants (for US only): HOLLANDER, DE, Johannes, Abraham [NL/NL]; Johan Wagenaarlaan 4, NL-2343 Ne Oegstgeest (NL). ESWILDER, Freddy, Ronald [NL/NL]; De Kringloop 29, NL-2624 WJ Delft (NL). ZANDEN, VAN DER, Paulus, Petrus, Maria [NL/NL]; Overvoorde 6, NL-2641 MS Pijnacker (NL).

- (74) Agents: MATULEWICZ, Emil, Rudolf, Antoni et al.; DSM Intellectual Property, Delft Office (600-0240), P.O. Box 1, NL-2600 Ma Delft (NL).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: FERMENTATION PROCESSES WITH LOW CONCENTRATIONS OF CARBON- AND NITROGEN-CONTAINING NUTRIENTS

Viscosity (cP)



(57) Abstract: The present invention describes a fermentation process for the production of a desired compound (such as natamycin) comprising cultivating a filamentous bacterial strain in a liquid fermentation medium, wherein the carbon containing nutrients and nitrogen containing nutrients are maintained at low concentrations in the fermentation medium. The process of the invention reduces the viscosity of the culture medium and therefore increases the yield of the desired compound.



WO 2004/087934 A1



Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.